



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Andrew Poyant, CDM Smith*

Date: November 9, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 9, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Andrew Poyant, CDM Smith biologist, beginning at 6:15 am and ending at 4:30 p.m. Weather conditions were cloudy in the morning with occasional drizzle transitioning to mostly clear and sunny in the afternoon, with temperatures ranging from 58°F in the morning to a high of 66°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with site cleaning and maintenance, concrete dam preparations, backfill placement at the boat ramp, placement of rock to elevate the gabion peninsula, and grouting of wall along the perimeter. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed. A construction crew of three wait in staging area. Two western gulls are observed flying north to south in the parking lot and an American crow flies north to south in parking lot.

6:20 am. The initial biological survey begins. One snowy egret flies from southwest of the tide gates toward the northwest mudflat and continues to fly north out of the site. One northern rough-winged swallow flies south to north along the western limit of the Basin and the eastern limit of the staging area. A second snowy egret flies from the southwest of the tide gates towards the Central Basin, turns around and leaves the site from the south. Three house finches fly along the palm trees

on Washington Boulevard. An American crow flies from east to west over the Basin and a second crow perches on a street light and flies east. A male and female mallard are swimming in the East Basin. A female dark-eyed junco, Oregon subspecies, perches on concrete rubble north of the East Basin. One American crow flies from north to south over the stormwater inlet.

7:15 am. The biological monitor arrives back at the trailer. The construction crews were already dispersed so the biological monitor gives the bio-awareness training to each construction crew, including subcontractors where they are working. Emphasis was placed on protection monarch butterflies, since several were seen the week before, and egrets, ducks and American crows that could wander close to construction activities. All workers signed the sign-in sheet.

7:30 am. The largest crew works to elevate the gabion peninsula. This involves delivery of gravel and rock using an excavator. Significant American crow activity is observed, with several flyovers.

7:50 am. California gull flies north to south above the Central Basin. One honey bee flies along the eastern limit of the gabion peninsula.

8:00 am. Four workers carry rebar from the Washington Boulevard entrance to the gabion peninsula. The pair of mallards observed during the initial monitoring are still swimming in the East Basin. A worker is watering the plants under the pine tree north of the East Basin. One American crow perches on the power line.

8:10 am. One dark-eyed junco, slate-colored subspecies, perches on a silt fence stake north of the southeast channel.

8:25 am. One juvenile eared grebe is swimming south of the retaining wall for the boat ramp at the southeast channel. The biological monitor spoke with the work crew to confirm all work would occur north of the retaining wall with the exception of pumping out the water. The crew was told to stop all work if the eared grebe moved into the work area and to contact the biological monitor.

8:50 am. The pair of mallards previously observed are not in the East Basin and appear to have left the site. One dragonfly flies near the two pine trees south of the Central Basin. Two workers are taking down the forms of the walls that were set south of the West and Central Basins.

9:15 am. One crow flies south to north above the West Basin. Two excavators are moving stone for the gabion peninsula. One monarch butterfly is flying near the northwest peninsula. The biological monitor notified the excavator operators in the West Basin of the presence of the monarch butterfly.

9:30 am. California gull flies along the southern limit of the site. Road construction with jack hammer at Mildred Avenue and Washington Boulevard. One female dark-eyed junco, Oregon subspecies, perches and flies from stake to stake on silt fence south of the stormwater inlet. Rock pigeons fly along the southern project limit near the Central Basin.

9:45 am. The pair of mallards are not observed in the East Basin.

10:00 am. Five house sparrows fly along the slit fence north of the southeast channel and perch on the stakes. One female black-eyed junco, Oregon subspecies perches on stake of silt fence north of the southeast channel. The juvenile eared grebe swims in the southeast channel, as the area south of the boat ramp was dewatered, the eared grebe moved into the channel.

10:15 am. One yellow-rumped warbler female flies along the southeast channel. Few rain drops observed; the weather report indicates 20% chance of precipitation, therefore work continues. A bulldozer moved crushed stone to the bottom of the boat ramp at the southeast channel. A small excavator evened out the crushed stone at the bottom of the boat ramp.

10:30 am. Adult black phoebe perches south of the southeast channel.

11:00 am. One western gull flies over the western limit of the site from north to south. One dragonfly and one sulfurs butterfly fly south over the potted plants near the staging area. One excavator brings crushed stone and places it in the gabion peninsula near the tide gates. A second excavator brings stone to fill gabion baskets at the second bend in the gabion peninsula from west to east.

11:30 am. Multiple California and western gulls fly over the West Basin.

12:05 pm. Construction crews and the biological monitor break for lunch.

12:55 pm. Work resumes elevating the gabion peninsula. Grading at the boat ramp continues and grouting of the walls continues. One western gull flies over northwest corner of site.

1:00 pm. Dump truck dumps crushed stone near excavator at the northwest limit of the Basin near the staging area. One monarch butterfly flies south to north approximately 30 feet east of tide gates. One excavator is removing sediment near the tide gates.

1:30 pm. One snowy egret flies from southwest to east of the stormwater inlet, landed in East Basin and wades in the water. The snowy egret flies southwest beyond the site. The eared grebe is still in the southeast channel but is slowly moving west in the channel.

2:00 pm. One monarch butterfly flies from south to north along the southeast corner of the site. The biological monitor reminded the workers at the boat ramp to be aware of monarch butterflies. One song sparrow flies into the site from the north and perches on a fence at the southeastern limit of the site.

2:15 pm. The eared grebe is in the same location as it was at 1:30 pm.

2:45 pm. Two American crows fly into the site at the northwest corner and leave the site. Three California gulls fly around the western part of the site and fly off site. One monarch butterfly flies between the third and fourth bend in the gabion peninsula, from west to east, and stays south of the gabion peninsula.

3:00 pm. One female dark-eyed junco, Oregon subspecies, perches on silt fence stakes south of the stormwater inlet and flies east. The eared grebe moved north in the southeast channel and is nearing the East Basin.

3:15 pm. One black phoebe perches and sings on silt fence stake north of the southeast channel and south of the pump house. Boat ramp crew starts to break down for the day.

3:30 pm. The eared grebe moved from the southeast channel into the east Basin and is swimming and noticeably more active than previously observed. A female black-eyed junco perches on a stake south of the West Basin. Twelve workers fabricate gabion baskets and fill gabion baskets with stone. One excavator continues to move stone for gabion baskets.

3:45 pm. One California gull flies along the north and central project limit.

4:00 pm. California gull flies over Central Basin from south to north.

4:15 pm. One great egret stands upgradient of silt fence at the northwest limit of the East Basin.

4:30 pm. All construction crews and the biological monitor leave the site for the day.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Four monarch butterflies were observed flying around the project site. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am with the exception of American crow and seagulls. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain.
4. Insects remain relatively common, including several species of dragonflies and butterflies,

including monarch, and Sulphur butterflies. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.

5. No algal blooms were observed.
6. Winter species have arrived including the eared grebe. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself after construction began. Wildlife activity within the project site is concentrated along the southeast channel away from work activity at the boat ramp.

Table 1 provides a list of bird species observed during biological monitoring on November 9, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 9, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals; Very common flying overhead
Great Egret	<i>Ardea alba</i>	1 individual observed resting outside the Basin
Snowy Egret	<i>Egretta thula</i>	3 individuals observed foraging in the Basin and flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	2 observed perching along southeast channel
House Finch	<i>Haemorhous mexicanus</i>	5 individuals observed in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	5 individuals observed near the southeast channel
Song Sparrow	<i>Melospiza melodia</i>	1 individual observed east of the southeast channel.
Rock Pigeon	<i>Columba livia</i>	Very common; observed on structures to the south of Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	4 individuals observed in the most commonly in the southeast channel
Tree Swallow	<i>Tachycineta bicolor</i>	1 individual flyover West Basin.
Mallard	<i>Anas platyrhynchos</i>	2 individual observed in East Basin
Eared Grebe	<i>Podiceps nigricollis</i>	1 individual observed in southeast channel and East Basin.
Yellow-rumped Warbler	<i>Dendroica coronate</i>	1 individual observed flying over southeast channel.



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Andrew Poyant, CDM Smith*

Date: November 10, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 10, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Andrew Poyant, CDM Smith biologist, beginning at 6:10 am and ending at 4:30 p.m. Weather conditions were sunny to partly cloudy with strong winds in the afternoon, with temperatures ranging from 50°F in the morning to a high of 66°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with backfill placement and grading at the boat ramp, and placement of rock to elevate the gabion peninsula. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:05 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed. Nobody is at the staging area.

6:10 am. The initial biological survey begins. Three snowy egrets fly over the Basin along the southern limit from east to west and fly out of the project site. One peregrine falcon flies along the southwestern limit of the site and perches atop of the building south of the tide gates. One black phoebe perches on the chain link fence of the stormwater inlet and calls to a black phoebe outside of the site. Four western gulls fly over Basin from west to east. A female and male mallard fly into East Basin at 6:30 am. One house sparrow flies into the eucalyptus tree east of the pump house. Two workers are dewatering by the boat ramp. One Anna's hummingbird flies along the eucalyptus

trees east of the pump house then flies north out of the project site. The pair of mallards is swimming in the East Basin at 6:45 am. Two rock pigeons fly over the site from the southwest to the northeast. Several American crows, western gulls and California gulls fly over project site; all three species were more commonly observed in the west and Central Basin than the East Basin and southeast channel. One house sparrow flies over staging area.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew and Contractor Superintendent. Emphasis was placed on protection monarch butterflies, since several were seen the previous day, and egrets, ducks and American crows that could wander close to construction activities. All workers signed the sign-in sheet.

7:15 am. The largest crew works to elevate the gabion peninsula. This involves delivery of rebar and rock using an excavator. One tree swallow flies south to north over West Basin. Two western gulls fly over Basin from north to south. Three American crows fly over Central Basin from north to south. One rock pigeon flies over the tide gates and perches on the building south of the tide gates.

7:30 am. One black phoebe flies over the western limit of the West Basin from north to south. Six American crows fly over the project site between 7:30 and 7:45 am. Two western gulls and one California gull fly over project site from 7:30 to 7:45 am.

7:45 am. One morning dove flies over the Central Basin from south to north. One dark-eyed junco flies over the Central Basin from north to south. Several American crows were observed flying over the site and standing along the West Basin. Three western gulls and one California gull was observed flying over the project site.

8:00 am. The pair of mallards observed during the initial biological survey flies from the East Basin toward the West Basin and continues west out of the project site. The biological monitor walks towards the boat ramp along the northern project area noting observed wildlife. Five western gulls fly over the project site from east to west. Two rock pigeons fly over the West Basin from north to south. One yellow-rumped warbler perches in the pine tree north of the East Basin. One female dark-eyed junco, Oregon subspecies, perches and flies from stake to stake of the silt fence north of the East Basin. A second dark-eyed junco, Oregon subspecies, is observed in the plants upgradient of the silt fence north of the southeast channel. One yellow-rumped warbler was observed on the southern shore of the southeast channel. Five dark-eyed juncos fly west above the southeast channel. One black phoebe perches on a stake of the silt fence south of the pump house and flies west above the southeast channel.

8:45 am. A three person crew fills and grades the south side of the retaining wall associated with the boat ramp. An excavator is used to move the backfill from the stockpile down into the south side of the retaining wall.

9:00 am. Two orange-crowned warblers perch in eucalyptus tree east of the pump house then flies west. One monarch butterfly flies over the northern limit of the project site along the eucalyptus trees. A second monarch butterfly is observed in the eucalyptus tree. One monarch butterfly flies from one eucalyptus tree to a different eucalyptus tree with a second monarch butterfly on its back.

9:15 am. One monarch butterfly flies on and off a eucalyptus tree. Three dark-eyed juncos are observed in southeast channel. One American crow and one western gull fly over the site. One black phoebe is observed in southeast channel.

9:30 am. One dump truck delivers more backfill. The small excavator moves the backfill closer to the large excavator. Three monarch butterflies fly off and then back onto a eucalyptus tree. One of the workers sprays the fill with a hose to prevent dust and the large excavator moves the fill just south of the boat ramp retaining wall. One monarch butterfly perches on plants south of the silt fence north of the southeast channel and flies east out of the project site. Four western gulls fly over the project site. The biological monitor moves closer to the excavator to coordinate in case monarch butterflies fly near the work.

9:45 am. No monarch butterflies were observed near the excavator. The biological monitor speaks to the excavator operator about being cautious of monarch butterflies prior to heading towards the gabion peninsula. The biological monitor walks along the southern project limit noting wildlife observations. One black phoebe is observed along the bank of the southeast channel. Eight American crows fly over the project site. One yellow-rumped warbler perches on a stake of the silt fence south of the southeast channel then flies north. One dark-eyed junco flies north of the southeast channel then continues flying north out of the project site. One monarch butterfly flies from plant to plant upgradient of the silt fence south of the southeast channel. Two western gulls and one California gull fly over the project site. One yellow-rumped warbler is observed in the vegetation near the silt fence south of the East Basin. Two dark-eyed juncos are observed, one perches and flies from stake to stake on silt fence south of the East Basin and the second perches on the wall of the stormwater inlet.

10:15 am. The biological monitor is noting observations from the gabion peninsula. The crew works to elevate the gabion peninsula with two large excavators delivering rock that the workers use to fill the gabion baskets. The wire gabion baskets and rebar are set into place by the crew. Three western gulls and three California gulls fly over the project site. Four American crows fly over the project site. One ring-billed gull flies over the project area from east to west. One monarch butterfly flies near the pine tree east of the tide gates; no work is occurring near the pine tree. One rock pigeon flies over the East Basin.

10:45 am. Five rock pigeons fly over the staging area. Two American crows fly over the West Basin.

10:55 am. The biological monitor walks toward the boat launch from atop of the gabion peninsula and along the northern perimeter of the site. One cloudless Sulphur butterfly (*Phoebis sennae*) flies over the Central Basin and exits the site from the north. One western gull flies over the project site. One monarch butterfly flies over the site from east to west over the southeast channel and East Basin. Two dark-eyed juncos perch on stakes of the silt fence north of the south east channel. One yellow-rumped warbler was observed in the southeast channel. One American crow flies over the project site. One black phoebe perches on rock in southeast channel.

11:15 am. A bulldozer delivers two loads of crushed stone near and the large excavator moves the crushed stone near the end of the boat ramp. Four monarch butterflies fly near the excavator. The biological monitor and the excavator operator remained in contact with each other to stop and start work to avoid injuring a monarch butterfly. One western gull flies over the project site.

11:35 am. The construction crew at the boat ramp breaks for lunch. No monarch butterflies were injured during work. One dark-eyed junco perches on the survey stake southwest of the stormwater inlet. One California gull and one rock pigeon fly over the project site.

11:45 am. The biological monitor arrives at the gabion peninsula. Four American crows were observed.

12:00 pm. The gabion peninsula construction crew and the biological monitor break for lunch.

1:00 pm. The biological monitor attends meeting with the Los Angeles County Department of Public Works in the construction trailer.

1:45 pm. The meeting ended and the biological monitor is noting observed wildlife at the gabion peninsula. One California gull flies over the site from south to north. Two American crows fly over the site from south to north. One western gull flies over the site.

2:00 pm. The biological monitor walks toward the southeast channel. One American crow flies over the project site. One dark-eyed junco perches on stake of silt fence west of the stormwater inlet. Two dark-eyed juncos fly over the East Basin. One great blue heron is standing on the shore at the western limit of the southeast channel.

2:30 pm. The biological monitor is observing work and wildlife at the boat ramp. The wind has increased, decreasing wildlife observations. A dump truck delivers fill and a worker sprays it with a hose as it is dumped to reduce dust. One monarch butterfly flies off and lands back on a eucalyptus tree. Four American crows fly over the project site. Eight western gulls fly over the Central Basin.

2:55 pm. The biological monitor speaks to the excavator operator reminding him to be on the lookout for monarch butterflies, especially if the wind decreases and to avoid them if they come into the work area. The biological monitor walks towards the gabion peninsula. Five American crows were observed. Two western gulls fly over the West Basin.

3:10 pm. The biological monitor observes work and wildlife from atop of the tide gates. Four California gulls fly over the project site.

3:30 pm. The biological monitor walks towards the boat ramp north of the Basin. One black phoebe perches on the chain link fence of the stormwater inlet. One California gull flies over the project site from east to west. A second black phoebe perches on a stake of the silt fence to the east of the stormwater inlet. Two female dark-eyed juncos perch on the stakes of the silt fence north of the East Basin. Two American crows fly over the project site. One yellow-rumped warbler is

observed in the vegetation along the shore of the southeast channel. One dark-eyed junco perches on a stake of the silt fence north of the southeast channel.

3:50 pm. The biological monitor arrives at the boat ramp. The wind has decreased in speed. Five monarch butterflies fly around the eucalyptus trees. One American crow flies over the project site. One snowy egret flies into the site from the east and lands in the southeast channel.

4:00 pm. The boat ramp construction crew breaks for the day. The snowy egret flies west stopping in the stormwater inlet then continues to fly west out of the project site. Several dark-eyed juncos are calling on the northeast peninsula. One black phoebe perches on a stake of the silt fence north of the Central Basin.

4:20 pm. The biological monitor and the gabion peninsula construction crew leave the site for the day.

Additional Observations

One peregrine falcon was observed prior to the start of work. No Black Skimmers, Osprey, or California Least Terns were observed today.

Twenty monarch butterflies were observed flying around the project site. Work was stopped for short periods of time near the boat ramp while monarch butterflies flew out of the work area. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 1:00 pm as winds increased with the exception of American crow, western gull and California gull. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain.
4. Insects remain relatively common, including monarch, and cloudless Sulphur butterflies. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease significantly when winds pick up.

5. No algal blooms were observed.
6. Winter species have arrived including the yellow-rumped warbler. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself after construction began. Wildlife activity within the project site is concentrated in the northeast peninsula and along the southeast channel away from work activity at the boat ramp.

Table 1 provides a list of bird species observed during biological monitoring on November 10, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 10, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals; Very common flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	1 individual observed flying overhead
Snowy Egret	<i>Egretta thula</i>	4 individuals observed foraging in the Basin and flying overhead
Great Blue Heron	<i>Ardea Herodias</i>	1 individual observed in southeast channel
Black Phoebe	<i>Sayornis nigricans</i>	9 observed perching along southeast channel and around the stormwater inlet
House Sparrow	<i>Passer domesticus</i>	2 individuals observed near the southeast channel and staging area
Rock Pigeon	<i>Columba livia</i>	12 individuals observed flying overhead
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals observed in the most commonly in the southeast channel and northeast peninsula
Tree Swallow	<i>Tachycineta bicolor</i>	1 individual flyover West Basin.
Mallard	<i>Anas platyrhynchos</i>	2 individual observed in East Basin
Yellow-rumped Warbler	<i>Dendroica coronate</i>	6 individual observed in East Basin and southeast channel
Anna's Hummingbird	<i>Calypte anna</i>	1 individual at eucalyptus tree near pump house
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual observed flying over tide gates and perched on building west of tide gates
Mourning Dove	<i>Zenaida macroura</i>	1 individual flying over Central Basin
Orange-crowned warbler	<i>Oreothylpis celata</i>	2 individual observed near the eucalyptus tree east of the pump house



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Wendy Katagi, CDM Smith
Andrew Poyant, CDM Smith

Date: November 12, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 12, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Andrew Poyant, CDM Smith biologist, beginning at 6:10 am and ending at 3:45 p.m. Weather conditions were sunny, with temperatures ranging from 54°F in the morning to a high of 74°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with backfill placement and grading at the boat ramp, and placement of rock to elevate the gabion peninsula. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed. Four cars are parked in the staging area.

6:15 am. The initial biological survey begins. Two western gulls and three California gulls fly over the project site. One American crow flies over the site. One house finch flies over the northern limit of the site from palm tree to palm tree near the stormwater inlet. Two black phoebes fly and perch around the stormwater inlet. One male and one female mallard swim in the East Basin. One great blue heron flies over the site from east to west. One snowy egret flies over the site from south to west. Two American crows fly over the site from east to west. One American crow perches on the power line. At 6:45 am the pair of mallards is still swimming in the East Basin. Five American

crows are present near the gabion peninsula. Two rock pigeons fly over the staging area. Orange fencing was around all the trees onsite.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew and Contractor Superintendent. Emphasis was placed on protection monarch butterflies, since several were seen previously this week, and egrets, ducks and American crows that could wander close to construction activities. Eighteen workers including the Contractor Superintendent signed the sign-in sheet.

7:15 am. The largest crew works to elevate the gabion peninsula. This involves delivery of rebar and rock using an excavator. Four rock pigeons fly over the project site. One American crow flies over the project site. Two western gulls fly over the project site.

7:35 am. The biological monitor walks towards the boat ramp. One Anna's hummingbird was observed flying, hovering and perching in the palm trees near the northwest peninsula. Two black phoebes are flying and perching in the stormwater inlet. One American crow flies over the project site. At 7:52 am the two mallards are still swimming in the East Basin. One Anna's hummingbird hovers around the pine tree north of the East Basin. One yellow-rumped warbler flies near the East Basin, perches on a mound and flies to the pine tree to perch. A second yellow-rumped warbler flies over the project site. One yellow-rumped warbler perches on the silt fence south of the southeast channel.

8:00 am. The biological monitor arrives at the boat launch. A three person crew is grading the area south of the retaining wall of the boat ramp. A small excavator is being used to move stone at the southwestern limit of the boat ramp, south of the retaining wall.

8:15 am. One black phoebe perches on a survey stake in the southeast channel. One Anna's hummingbird hovers above the southeast channel, and then perches on the eucalyptus tree east of the pump house. Two western gull fly over the project site. One American crow flies over the project site. The large excavator is being used to place fill south of the retaining wall.

8:30 am. One monarch butterfly flies off the eucalyptus tree and continues to fly over the southeast channel before returning to the eucalyptus tree.

8:40 am. One dump truck delivers fill. One monarch butterfly flies off a eucalyptus tree then lands back on the eucalyptus tree. One black phoebe and one yellow-rumped warbler perches on stakes of the silt fence north of the southeast channel. One Monarch butterfly flies west off of the eucalyptus tree. One monarch butterfly flies east off eucalyptus tree. One monarch butterfly flies from one eucalyptus tree to another. Three monarch butterflies fly around with one chasing the other. One monarch butterfly flies east to west past the pump house. One monarch butterfly flies off the eucalyptus and lands back on it.

9:00 am. One monarch butterfly flies along Admiralty Way west to east. Two monarch butterflies fly into boat ramp and fly off the site to the east.

9:05 am. One dump truck delivers backfill. One American crow flies over the project site. One monarch butterfly perches on the pump house. One yellow-rumped warbler perches on stakes of the silt fence north of the southeast channel. Four American crows are standing along the south bank of the southeast channel. Two monarch butterflies fly over the boat ramp and head west. One black phoebe perches on a survey stake in the southeast channel. One yellow-rumped warbler is in the southeast channel and flies north out of the project site. One monarch butterfly lands in the boat ramp.

9:20 am. A worker moves the small excavator down the boat ramp. The biological monitor stops the worker, and shoo away the monarch butterfly out of the work area. Work continues.

9:30 am. One dump truck delivers backfill. One western gull flies over the project site. One black phoebe perches on the stake of the silt fence south of the southeast channel. One monarch butterfly flies along the northern fence of the project site and continues flying east off site.

9:40 am. The biological monitor speaks with the crew about being extra cautious about avoiding monarch butterflies, especially when moving equipment that has been turned off. The biological monitor walks towards the gabion peninsula. Two western gulls fly over the site. One monarch butterfly flies in the southeast channel. One dragonfly flies in the southeast channel. One yellow-rumped warbler is on the southern bank of the southeast channel. One say's phoebe perches on a stake of the silt fence south of the southeast channel. Two dragonflies fly north of the East Basin. At 9:50 the pair of mallards is no longer present in the East Basin. One black phoebe is present in the stormwater inlet. One monarch and one dragonfly fly along the Central Basin. One monarch butterfly flies in the West Basin.

10:00 am. The biological monitor arrives at the northwest peninsula. Two monarch butterflies fly west to east over the gabion peninsula. One dragonfly flies between the West Basin and the northwest peninsula. One sulfurs butterfly flies along the western project limit. One monarch butterfly flies east to west over the West Basin. One California gull flies over the project site.

10:30 am. The biological monitor walks towards the boat ramp. Three sulfur butterflies are flying along the northwestern mudflat. Two American crows fly over the site from southeast to northwest. One monarch butterfly flies over the East Basin. Two black phoebes are in the stormwater inlet. One phoebe perches on a stake of silt fence north of the East Basin. One monarch butterfly flies west to east over the southeast channel. Two yellow-rumped warblers are on the southern bank of the southeast channel.

10:55 am. The biological monitor arrives at the boat ramp. One black phoebe perches on a stake in the southeast channel. One monarch and two sulfur butterflies fly over the site. Two sulfur and one monarch butterflies fly west to east. One monarch butterfly flies north to south. One monarch butterfly flies west to east. Four monarch butterflies fly in the southeast channel. One sulfur butterfly flies southeast to northwest.

11:10 am. One dump truck delivers backfill. One sulfur butterfly flies in the project site from the east and continues west in the southeast channel. Three monarch butterflies fly around the boat

ramp. One monarch butterfly flies north to south. One monarch butterfly flies east to west. One sulfur butterfly flies west to east. One American crow flies over the site from west to east. One black phoebe chases one sulfur butterfly; the sulfur butterfly escapes the black phoebe. One Anna's hummingbird flies over the site from north to south. Three monarch butterflies fly near the southeast channel. One American crow flies over the site. One monarch butterfly flies west to east. A pair of monarch butterflies mates on the ground north of the boat ramp.

11:30 am. One monarch butterfly flies over the boat ramp. Two monarch butterflies fly west down the southeast channel. One monarch butterfly flies west to east.

11:45 am. One monarch butterfly flies near the large excavator and landed in the fill. The excavator operator stopped the excavator until the monarch butterfly flew away. Work stopped and started again two more times due to monarch butterflies entering the work area. One monarch butterfly flies into the eucalyptus tree.

11:55 am. The biological monitor heads towards the gabion peninsula.

12:00 pm. The construction crew and the biological monitor break for lunch.

12:45 pm. Construction starts and the biological monitor monitors work at the gabion peninsula. One great egret flies over the West Basin from east to west. Three California gulls fly over the project site.

1:00 pm. Three monarch butterflies fly over the West Basin. Two sulfur butterflies fly over the West Basin. One rock pigeon flies over the project site. Five western gulls fly over the project site. One great egret flies over the staging area. The biological monitor stops work for a short period of time for a monarch butterfly to fly out of the work area.

1:30 pm. Two black-crowned night-herons fly and land in the East Basin, then fly southwest out of the project site. Three rock pigeons fly over the project site. Four California and two western gulls fly over the project site.

2:00 pm. The biological monitor walks towards the boat ramp. One black phoebe is in the stormwater inlet. Three yellow-rumped warblers are in the vegetation on the southern bank of the southeast channel. One western gull flies over the project site. One black phoebe is on the southern bank of the southeast channel. One yellow-rumped warbler perches in the eucalyptus tree.

2:20 pm. The biological monitor arrives at the boat ramp. The construction crew has completed work and is heading to the gabion peninsula to assist in the work there. The biological monitor walks back to the gabion peninsula along the southern limit of the project site. One monarch butterfly rests on the ground near the eastern project limit. Two yellow-rumped warblers are in the vegetation on the northern bank of the southeast channel. One say's phoebe perches on a stake of the silt fence south of the Central Basin.

2:35 pm. The biological monitor observes work on the gabion peninsula from east of the pine trees south of the West Basin. Two western gulls fly over the West Basin. Two American crows fly over the West Basin.

2:45 pm. The biological monitor observes work from the western retaining wall. Four western gulls fly over the project site.

3:00 pm. Three western gulls fly over the project site.

3:15 pm. One male and one female mallard fly into the East Basin. Five western gulls fly over the project site. Two rock pigeons fly over the project site.

3:40 pm. Two western gulls fly over the project site.

3:45 pm. The biological monitor and the construction crew leave the site for the day.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Several monarch butterflies were observed flying around the project site. Work was stopped for short periods of time near the boat ramp and the gabion peninsula while monarch butterflies flew out of the work area. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 1:00 pm with the exception of American crow, western gull and California gull. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain.
4. Insects remain relatively common, including monarch, and sulphur butterflies. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease slightly in the afternoon.

5. No algal blooms were observed.
6. Winter species have arrived including the yellow-rumped warbler, say's phoebe, great egret, and California gull. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity largely consists of monarch butterflies at the boat ramp. Wildlife activity within the project site is concentrated in the East Basin and along the southeast channel.

Table 1 provides a list of bird species observed during biological monitoring on November 12, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 12, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals; Very common flying overhead
Snowy Egret	<i>Egretta thula</i>	One individuals observed flyover
Great Egret	<i>Ardea alba</i>	Two individuals observed flyover
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	Two individuals in East Basin
Great Blue Heron	<i>Ardea Herodias</i>	1 individual observed in flyover
Black Phoebe	<i>Sayornis nigricans</i>	Several observed perching along southeast channel and around the stormwater inlet
Say's Phoebe	<i>Sayornis saya</i>	Two observed perching along the southeast channel
Rock Pigeon	<i>Columba livia</i>	Several individuals observed flying overhead
Mallard	<i>Anas platyrhynchos</i>	4 individual observed in East Basin
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individual observed in East Basin and southeast channel
Anna's Hummingbird	<i>Calypte anna</i>	4 individual at eucalyptus tree near pump house, southeast channel and palm trees along Washington Boulevard



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Andrew Poyant, CDM Smith*

Date: November 13, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 13, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Andrew Poyant, CDM Smith biologist, beginning at 6:10 am and ending at 4:35 p.m. Weather conditions were sunny, with temperatures ranging from 56°F in the morning to a high of 78°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with pouring concrete at the gabion peninsula and in the morning trucks delivered backfill at the Mildred Avenue entrance. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:10 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer is closed. Six cars are parked in the staging area.

6:15 am. The initial biological survey begins. One western gull flies over the Central Basin. One yellow-rumped warbler perches on the chain link fence of the stormwater inlet. Two black phoebes are in the stormwater inlet. One yellow-rumped warbler and one black phoebe are in the vegetation on the north bank of the East Basin. One house finch flies from a palm tree along Washington Boulevard over the northwest peninsula and back to the palm tree. One yellow-rumped warbler flies over the East Basin from north to south. One western gull flies and lands in the East Basin. Two western gulls fly over the site from west to east. One say's phoebe perches on a survey stake at the southwestern corner of the East Basin. Three great egrets fly over the Basin

from west to east and continue southeast out of the project site. One say's phoebe flies onto and perches on the gabion basket at the eastern limit of the gabion peninsula. One mourning dove flies over the West Basin from south to north. Several American crows fly over the project site or are perched on the power lines. One double-crested cormorant flies over the staging area from north to south. Orange fencing is around all trees within the project site.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew and Contractor Superintendent. Emphasis was placed on protection monarch butterflies, since several were seen previously this week, and egrets, ducks and American crows that could wander close to construction activities. Workers were reminded to clean up trash in the work area prior to the end of the work day. Twenty two people including the Contractor Superintendent signed the sign-in sheet.

7:10 am. The crew prepares for pouring concrete at the gabion peninsula. This involves bringing hoses down to the gabion peninsula and connecting them, cleaning the interior of the gabion peninsula and removing the safety covers from the rebar. Three western gulls fly over the West Basin from east to west. One rock pigeon flies over the West Basin from southwest to northeast. Three American crows are in the northwest corner of the site. One American crow flies over the site. Some workers continue placing rock in the gabion baskets and setting rebar.

7:45 am. Two American crows perch on the power line and fly out of the project site. One American crow flies over the project site from east to west. One western gull flies over the site from south to north. The concrete pump truck arrives and sets up on the northwest peninsula. The biological monitor gives the bio-awareness training to the two concrete workers and they sign the sign-in sheet.

8:05 am. One black-crowned night heron flies over the Central Basin from south to north.

8:30 am. One western gull flies over the project site from west to east. Five western gulls fly over the project site from east to west. One house sparrow flies to the northwest peninsula. Seven mourning doves perch on the power lines on the northeast peninsula. One American crow flies over the project site.

9:00 am. Two monarch butterflies fly over the West Basin. One American crow and one western gull fly over the project site.

9:15 am. Four concrete trucks arrive and wait on Washington Boulevard. Two monarch butterflies fly in the West Basin. Two American crows fly over the project site.

9:25 am. One male and one female mallard fly out of the East Basin and head northwest out of the project site. One monarch flies north to south along the western limit of the project site. Two American crows fly over the West Basin. One western gull flies over the West Basin. One American crow flies over the East Basin. One monarch butterfly flies east over the gabion peninsula. Two sulfur butterflies fly in the West Basin.

9:45 am. A fifth concrete truck arrives. The first truck finishes pouring concrete. One black phoebe perches on mound in Central Basin. One black phoebe flies north to south in West Basin. One western gull flies west to east over the project site.

10:00 am. The second truck finishes pouring concrete. One monarch butterfly flies over northwest corner of project site. One dragonfly flies east along the gabion peninsula. One belted kingfisher flies into the project site from the southwest and perches on the power lines in the northeast peninsula before flying out of the project site.

10:15 am. The third truck finishes pouring concrete. One sulfur butterfly flies south to west over the West Basin. One sulfur butterfly flies west to east over the gabion peninsula.

10:25 am. The fourth truck finishes pouring concrete. The belted kingfisher perches on the powerlines in the northeast peninsula.

10:35 am. One snowy egret flies into the East Basin and wades in the Basin.

10:40 am. The fifth concrete truck finishes pouring concrete. One say's phoebe flies west to east in the project site. Two American crows fly north to south over the West Basin.

10:50 am. The sixth concrete truck finishes pouring concrete. One monarch flies west to east over the gabion peninsula. One western gull flies over the project site. One sulfur butterfly flies north of the gabion peninsula. Two sulfur butterflies fly south of the gabion peninsula.

11:18 am. The eighth truck finishes pouring concrete. One sulfur butterfly flies south to north.

11:30 am. The ninth truck finishes pouring concrete. One monarch butterfly flies south to north over the West Basin.

11:40 am. The tenth truck finishes pouring concrete. One rock pigeon flies over the project site. Four monarch butterflies fly over the West Basin. One American crow is in the Central Basin.

11:55 am. The eleventh truck finishes pouring concrete. Two monarch butterflies fly over the gabion peninsula. Four American crows are along the western limit of the project site.

12:05 pm. The twelfth truck finishes pouring concrete. Two sulfur butterflies fly north of the gabion peninsula. One sulfur butterfly flies south of the gabion peninsula. One American crow is in the West Basin. Two western gulls fly over the West Basin.

12:15 pm. The biological monitor breaks for lunch.

1:10 pm. The biological monitor returns from lunch. One rock pigeon flies the tide gates, and perches on the building south of the tide gates. One monarch butterfly flies north to south over the West Basin.

1:30 pm. Five western gulls fly over the project site. Five rock pigeons fly over the West Basin and perch on the building south of the West Basin. One yellow-rumped warbler perches on the powerline between the trailer and the West Basin. One yellow-rumped warbler flies over the project site from north to south.

2:00 pm. One American crow flies over from north to south. One American crow flies over from south to north. Two western gulls fly over from west to east. One western gull flies over from north to south. Five western gulls fly over from south to north. One American crow flies over from east to west. One yellow-rumped warbler flies over the West Basin from south to north.

2:30 pm. Two snowy egrets fly in from the west and land in the East Basin. One of the snowy egrets flies out of the East Basin off site to the west. Four American crows fly over the project site from west to east.

2:50 pm. The biological monitor walks around the project site. One of the original two snowy egrets is still in the East Basin. One black phoebe and one yellow-rumped warbler perches on the fence of the stormwater inlet. One yellow-rumped warbler flies and lands sediment in the East Basin. One black phoebe perches on a survey stake in the East Basin. Two black phoebes perch on stakes of the silt fence south of the East Basin. One yellow-rumped warbler flies onto and perches on a stake of the silt fence south of the East Basin and flies off. Several crows fly over the site. Orange fencing is up around the trees in the project site.

3:20 pm. The biological monitor monitors work at the gabion peninsula. One yellow-rumped warbler perches on a survey stake on the northeast peninsula. One black phoebe is in the Central Basin.

3:40 pm. Four female and five male mallards fly into the East Basin. Several western gulls fly over the project site. One male dark-eyed junco is by the pine tree east of the tide gates.

4:05 pm. One mallard male flies west out of the East Basin and continues out of the project site. Several western gulls fly over the West Basin.

4:35 pm. The biological monitor and the construction crew leave the site for the day.

Additional Observations

No Black Skimmers, Osprey, or California Least Terns were observed today.

Several monarch butterflies were observed flying around the project site. Work was stopped for short periods of time near the gabion peninsula while monarch butterflies flew out of the work area. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 1:00 pm with the exception of American crow, and western gull. Wildlife activity increases slightly in the late afternoon.
3. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain.
4. Insects remain relatively common, including monarch, and sulphur butterflies. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease slightly in the afternoon. No monarch butterflies were harmed during construction.
5. Some brown algae was observed in the East Basin.
6. Winter species have arrived including the yellow-rumped warbler, say's phoebe, and great egret. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
7. Wildlife activity in the work area largely consists of monarch butterflies. Wildlife activity within the project site is concentrated in the East Basin and along the southeast channel where water is present.

Table 1 provides a list of bird species observed during biological monitoring on November 13, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 13, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Snowy Egret	<i>Egretta thula</i>	Three individuals observed in East Basin
Great Egret	<i>Ardea alba</i>	Three individuals observed flyover
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	One individual observed in flyover
Black Phoebe	<i>Sayornis nigricans</i>	Several observed perching along southeast channel, West Basin and around the stormwater

		inlet
Say's Phoebe	<i>Sayornis saya</i>	Three observed perching in East and West Basin
Rock Pigeon	<i>Columba livia</i>	Several individuals observed flying overhead
Mallard	<i>Anas platyrhynchos</i>	11 individual observed in East Basin and flying over
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individual observed in West Basin, East Basin and southeast channel
House Finch	<i>Carpodacus mexicanus</i>	1 individual observed around palm trees on Washington Blvd
Mourning Dove	<i>Zenaida macroura</i>	8 individuals observed in the West Basin and perching on the power lines
Double Crested Cormorant	<i>Phalacrocorax auritus</i>	1 individual observed flying over the staging area
House Sparrow	<i>Passer domesticus</i>	1 individual observed flying over the northwest peninsula
Belted Kingfisher	<i>Ceryle alcyon</i>	1 or 2 individuals observed perching on the power lines on the east peninsula
Dark-eyed Junco	<i>Junco hyemalis</i>	1 individual observed south of the West Basin



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Wendy Katagi, CDM Smith
Andrew Poyant, CDM Smith*

Date: November 14, 2015

Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on November 14, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Andrew Poyant, CDM Smith biologist, beginning at 7:10 am and ending at 3:45 p.m. Weather conditions were sunny, with temperatures ranging from 52°F in the morning to a high of 75°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with pouring concrete at the western end of the gabion peninsula, grout the perimeter concrete wall, removing soil at the boat ramp, and backfilling the eastern limit of the gabion wall. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

7:10 am. Biological monitor arrives on site to conduct initial assessment. Several workers are on site including the Contractor Superintendent and the Inspector of Record.

7:15 am. The initial biological survey begins. Two black phoebes perch on the wall of the stormwater inlet. One yellow-rumped warbler is observed in the stormwater inlet. Three western gulls fly over the project site from northeast to southwest. Two yellow-rumped warblers fly in and out of the pine tree north of the East Basin. One American crow is observed on the northern bank of the East Basin. One yellow-rumped warbler is in the vegetation on the northern bank of the East Basin. One Anna's hummingbird hovers over the southeast channel south of the pump house and flies toward the eucalyptus tree. One black phoebe perches on a stake of the silt fence to the north

of the southeast channel. One yellow-rumped warbler is perched in the eucalyptus tree. One Anna's hummingbird hovers and perches on the vegetation north of the boat ramp. Two yellow-rumped warblers fly out of the pine north of the East Basin toward the southwest corner of the East Basin. Four least sandpipers feed in the East Basin. Two rock pigeons fly over the tide gates and perch on the building south of the tide gates. Several American crows and western gulls observed during the initial biological survey. One Canada goose flies over the western limit of the West Basin from south to north. One dark-eyed junco is observed in the East Basin. Orange fencing is up around the trees on the site.

8:10 am. The biological monitor arrives back at the trailer. The construction crews have already dispersed so the biological monitor gives the bio-awareness training to each construction crew, including subcontractors where they are working. Emphasis was placed on protection of monarch and other butterflies, since several were observed throughout the week, egrets, ducks and American crows that could wander close to construction activities. Workers were also reminded to clean up all trash at the end of the day. All workers signed the sign-in sheet.

8:20 am. Five crows are on the southern bank of the West Basin. Two large excavators place backfill on top of the eastern limit of the gabion peninsula.

8:30 am. One dead, first fall, eared grebe is observed at the western limit of the East Basin approximately 80 feet south of the stormwater inlet. No observable bite marks, wounds, or cuts on the eared grebe are found. There is no noticeable exterior damage to the eared grebe. No predators' tracks are observed around the western limit of the East Basin. The closest excavator activity is approximately 25 feet west, over a 2 to 3 foot mound. Water around the eared grebe has brown algae and is slightly turbid. Workers were asked if they have seen anything happen to the eared grebe (e.g. if it flew into equipment), nobody saw anything. There has been water present in the East Basin and southeast channel all week due to a discharge into the stormwater system. Source of water is unknown. Photos 1 through 3 depict the eared grebe and the surroundings.



Photo 1: Dead eared grebe



Photo 2: Eared grebe is to the right of the clip board in the foreground. Photo depicts distance to excavator and height of mound between East Basin and equipment.



Photo 3: Eared grebe and water of the East Basin.

9:20 am. One dark-eyed junco is observed in the Central Basin. One black phoebe flies over the north of the Central Basin. One western gull flies from east to west. One American crow flies over the East Basin from south to north. One black phoebe is observed in the stormwater inlet. One sulfur butterfly is observed east of the stormwater inlet. Three dragonflies fly above the northern bank of the southeast channel.

9:45 am. One say's phoebe perches on stakes north of the southeast channel. Several dragonflies fly over the southeast channel. One black phoebe perches along the southeast channel. Two workers remove soil to required grades on the boat ramp. One yellow-rumped warbler flies east along the southern portion of the East Basin.

10:15 am. One sulfur butterfly flies over the staging area. Two rock pigeons fly over the West Basin from south to north. One sulfur butterfly flies over the West Basin from east to west. One monarch butterfly flies over the West Basin from south to north. One sulfur butterfly and two monarch butterflies are observed in the West Basin.

10:45 am. The biological monitor walks around the site. One monarch butterfly is observed in the northwest peninsula and the West Basin. Two dragonflies are observed in the Central Basin. One black phoebe is observed in the stormwater inlet. Small patches of green algae are observed in the stormwater inlet. One monarch butterfly flies south of the stormwater inlet. Several dragonflies fly over the East Basin. One black phoebe is observed in the East Basin. One monarch butterfly flies over the northern bank of the East Basin. One say's phoebe perches on a stake in the northeast peninsula. Two least sandpipers wade in the East Basin. One yellow-rumped warbler and one black phoebe are observed in the southeast channel. One monarch butterfly flies above the southeast channel. Raccoon tracks are observed in the southeast channel south of the pump house.

11:05 am. The biological monitor arrives at the boat ramp. One monarch butterfly flies near the excavator. The operator stops until the monarch butterfly flies out of the work area. Two monarch butterflies fly over the southeast channel from west to east. One monarch butterfly flies around the eucalyptus trees. One yellow-rumped warbler perches in the eucalyptus tree.

11:20 am. The excavator operator stops and starts work due to a monarch butterfly in the work area. Two sulfur butterflies fly around the eucalyptus trees. One monarch butterfly flies over the dump truck and continues east out of the project site.

11:30 am. The dump truck is full and leaves the boat ramp area. The biological monitor walks towards the gabion peninsula. One say's phoebe flies east above the southeast channel. One monarch butterfly flies over the Central Basin from south to north. One black phoebe flies west to east over the Central Basin. One black phoebe is observed in the stormwater inlet. Two sulfur butterflies fly into the path that the excavator takes to get to the eastern limit of the gabion peninsula. The excavator operator stops until the butterflies are out of the path of the excavator. One sulfur butterfly flies above the northeast peninsula. One ring-billed gull flies over the Basin from west to east.

12:00 pm. One peregrine falcon and two American crows fly into the project area and soar over the Central Basin.

12:15 pm. The biological monitor breaks for lunch.

12:45 pm. The biological monitor monitors work at the West Basin.

1:00 pm. One monarch butterfly flies over the West Basin from south to north. Three California gulls fly over the West Basin from north to south. One California gull flies over the site from southwest to northeast.

1:25 pm. The biological monitor walks towards the boat ramp. One dragonfly flies above the Central Basin. One snowy egret is wading in the stormwater inlet. One yellow-rumped warbler is in the vegetation of the northeast peninsula. One black phoebe perches on the rope in the stormwater inlet. One dragonfly flies over the East Basin.

1:35 pm. The biological monitor arrives at the boat ramp. Three monarch butterflies fly around the eucalyptus trees.

1:40 pm. The dump truck is full and leaves the boat ramp area. Three monarch butterflies fly near the eucalyptus trees. One monarch butterfly flies west to east and continues east out of the project site. One monarch butterfly lands on the ground behind the excavator. The biological monitor shoos it out of the way and the crew continues to work. One sulfur butterfly flies north of the boat ramp. Two yellow-rumped warblers fly from the southeast channel into the eucalyptus tree and perches.

2:00 pm. Five monarch butterflies fly along the eucalyptus trees. One stop and start of work occurs while the excavator fills the dump truck due to a monarch butterfly in the work area.

2:10 pm. The dump truck is full and leaves the boat ramp area. One monarch butterfly flies over the boat ramp from north to south.

2:15 pm. The biological monitor walks towards the Central Basin. One yellow-rumped warbler flies west and perches on a stake of the silt fence north of the southeast channel before continuing to fly north of the project site.

2:30 pm. The biological monitor observes from the stormwater inlet. One black phoebe perches on the wall of the stormwater inlet. One yellow-rumped warbler perches on the rope in the stormwater inlet.

3:00 pm. The biological monitor observes from the eastern limit of the gabion peninsula. One California gull flies over the project site from west to east. Two western gulls fly over the project site. Two American crows fly over the project site from east to west.

3:30 pm. The biological monitor observes the concrete cleanup along the western limit of the west Basin.

3:45 pm. The biological monitor and the construction crew leave the site for the day.

Additional Observations

One Peregrine falcon is observed. No Black Skimmers, Osprey, or California Least Terns were observed today.

Several monarch butterflies were observed flying around the project site. Work was stopped for short periods of time near the eastern limit of the gabion peninsula and the boat ramp while monarch butterflies flew out of the work area. No butterflies or other wildlife were harmed due to construction activities. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on.
2. One Eared Grebe was observed dead in the East Basin. No signs of predation or injuries due to construction activities were observed.
3. In general, wildlife is most active in the East Basin, stormwater inlet and southeast channel, due to the presence of water.
4. No fish were directly observed in the remaining pools, but the continued presence of wading birds stalking the shallows indicates that at least a few invertebrates likely remain.
5. Insects remain relatively common, including dragonflies, monarch, and sulphur butterflies. Butterflies are attracted to the moist soils and flowering plants. Monarchs are being observed with more regularity; however, observations decrease slightly in the afternoon.
6. Brown algae is present in the East Basin and small patches of green algae are present in the stormwater inlet.
7. Winter species have arrived including the yellow-rumped warbler, say's phoebe, and least sandpiper. As autumn continues, it is expected that migrants and winter species will be observed at the site more frequently moving forward.
8. Wildlife activity in the work area largely consists of monarch butterflies. No monarch butterflies were harmed during construction activities. Wildlife activity within the project site is concentrated in the East Basin and along the southeast channel where water is present.

Table 1 provides a list of bird species observed during biological monitoring on November 14, 2015.

Table 1. Bird Species Observed during Biological Monitoring on November 14, 2015		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Five individuals fly overhead
Ring-billed Gull	<i>Larus delawarensis</i>	One individual flies overhead
Snowy Egret	<i>Egretta thula</i>	One individual observed in stormwater inlet
Black Phoebe	<i>Sayornis nigricans</i>	Several observed perching along southeast

		channel, West Basin and around the stormwater inlet
Say's Phoebe	<i>Sayornis saya</i>	Three observed perching in southeast channel and northeast peninsula
Rock Pigeon	<i>Columba livia</i>	Four individuals observed flying over the west Basin and perching on the building south of the West Basin
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Several individual observed in West Basin, East Basin and southeast channel
Dark-eyed Junco	<i>Junco hyemalis</i>	Two individuals observed in East Basin and Central Basin
Canada Goose	<i>Branta canadensis</i>	One individual observed flying over the west Basin
Least Sandpiper	<i>Calidris minutilla</i>	Six individuals observed wading and feeding in the east Basin
Anna's Hummingbird	<i>Calypte anna</i>	Two individuals observed hovering above the southeast channel
Eared Grebe	<i>Podiceps nigricollis</i>	One dead individual observed in East Basin
Peregrine Falcon	<i>Falco peregrinus</i>	One individual observed soaring over the Central Basin